

### **Amendments to the Claims**

Please replace the pending claims with the following claims.

1 - 16. (Canceled)

17. (New) A method for predicting the phospholipidosis induction potential of a test compound in human cells comprising:

A. (i) treating at least ten samples with one compound known to induce phospholipidosis, wherein each of said samples comprises said human cells and wherein each of said ten samples is treated with a different compound;

(ii) determining the level of expression of SEQ ID NOs. 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23 from said samples of (A)(i);

(iii) determining the level of expression of SEQ ID NOs. 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23 from ten control samples, wherein each of said control samples comprises said human cells wherein said human cells are not treated with said at least one compound known to induce phospholipidosis; and

(iv) determining the average value of the expression variation rate for SEQ ID NOs. 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23 for said samples treated with said at least one compound known to induce phospholipidosis relative to said control samples; and

B. (i) treating a sample comprising said human cells with a test compound;

(ii) determining the level of expression of SEQ ID NOs. 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23 from said sample of (B)(i);

(iii) determining the level of expression of SEQ ID NOs. 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23 from a control sample wherein said control sample comprises said human cells and wherein said human cells are not treated with said test compound of (B)(i); and

(iv) determining the average value of the expression variation rate for SEQ ID NOs. 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21 and 23 for said sample of (B)(i) relative to said control sample of (B)(iii); and

C. comparing the average value of the expression variation rate of (A)(iv) with the average value of the expression variation rate of (B)(iv), and

wherein a test compound having an average value of the expression variation rate greater than the expression variation rate of (A)(iv) is predicted to induce phospholipidosis in said human cells.

18. (New) The method of claim 17, wherein said compound known to induce phospholipidosis produces a myelin-like structure in said human cells.

19. (New) The method of claim 18, wherein said compound known to induce phospholipidosis is selected from the group consisting of amitriptyline, chlorcyclizine, fluoxetine, amiodarone, AY-9944, chlorpromazine, imipramine, tamoxifen, perhexiline, clozapine, sertraline, clomipramine, thioridazine, zimelidine, ketoconazole, loratadine and pentamidine.

20. (New) The method of claim 17, wherein said human cells are derived from an organ or tissue exposed to said test compound.